

IN THE CLAIMS:

Please amend the claims as follows.

1-18. (Cancelled)

19. (Currently amended) A system to attenuate jet engine noise comprising:
a fluid duct for increasing air velocity adjacent to an inlet fan duct outer wall,
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of a fan rotor, the slot in the first end being disposed upstream of the fan rotor, wherein said fluid duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein said fluid duct is structured of sufficient dimension for allowing a mass flow rate of air within a range of one percent to two percent of said ambient inlet air.

20. (Cancelled)

21. (Currently amended) A system to attenuate jet engine noise comprising:
a fluid duct for increasing air velocity adjacent to an inlet fan duct outer wall,
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of a fan rotor, the slot in the first end being disposed upstream of the fan rotor, wherein said fluid duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein said first end having a slot therein further comprises one of a contiguous slot therein and a segmented slot therein.

22. (Currently amended) A system to attenuate jet engine noise comprising:
a fluid duct for increasing air velocity adjacent to an inlet fan duct outer wall,
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of a fan rotor,

the slot in the first end being disposed upstream of the fan rotor, wherein said fluid duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein said first end having a slot therein disposed circumferentially along said inlet fan duct outer wall.

23. (Currently amended) A system to attenuate jet engine noise comprising:
a fluid duct for increasing air velocity adjacent to an inlet fan duct outer wall,
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of a fan rotor, the slot in the first end being disposed upstream of the fan rotor, and wherein said second end is smaller in width than said body, said second end structured to provide a steep expansion in width connecting to said body.

24. (Original) The system as in claim 19, wherein said fluid duct is structured to provide a plenum.

25. (Currently amended) A system to attenuate jet engine noise comprising:
a fluid duct for increasing air velocity adjacent to an inlet fan duct outer wall;
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of a fan rotor, the slot in the first end being disposed upstream of the fan rotor, wherein said fluid duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein at least one of said first end having a slot therein, said second end having a slot therein and said body is structured in an annular form.

26. (Original) The system as in claim 19, wherein said fluid duct is substantially disposed within a nacelle.

27. (Cancelled)

28. (Currently amended) A system to attenuate jet engine noise comprising:
a nacelle surrounding a fan rotor and a fan discharge outlet guide vane; said nacelle having an inlet fan duct outer wall;
an acoustic liner attached to said nacelle;
a turbine shaft for generating motive forces on said fan rotor; and
a fluid duct for increasing air velocity adjacent to said inlet fan duct outer wall;
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of said fan rotor, the slot in the first end being disposed upstream of the fan rotor, wherein said fluid duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein said first end having a slot therein further comprises one of a contiguous slot therein and a segmented slot therein.

29. (Original) The system as in claim 28, wherein said fluid duct is structured of sufficient dimension for allowing a mass flow rate of air within a range of one percent to two percent of said ambient inlet air.

30. (Cancelled)

31. (Currently amended) A system to attenuate jet engine noise comprising:
a nacelle surrounding a fan rotor and a fan discharge outlet guide vane; said nacelle having an inlet fan duct outer wall;
an acoustic liner attached to said nacelle;
a turbine shaft for generating motive forces on said fan rotor; and
a fluid duct for increasing air velocity adjacent to said inlet fan duct outer wall;
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of said fan rotor, the slot in the first end being disposed upstream of the fan rotor, wherein said fluid

duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein said first end having a slot therein disposed circumferentially along said inlet fan duct outer wall.

32. (Currently amended) A system to attenuate jet engine noise comprising:
a nacelle surrounding a fan rotor and a fan discharge outlet guide vane; said nacelle having an inlet fan duct outer wall;
an acoustic liner attached to said nacelle;
a turbine shaft for generating motive forces on said fan rotor; and
a fluid duct for increasing air velocity adjacent to said inlet fan duct outer wall;
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of said fan rotor, the slot in the first end being disposed upstream of the fan rotor, and wherein said second end is smaller in width than said body, said second end being structured to provide a steep expansion in width connecting to said body.

33. (Original) The system as in claim 28, wherein said fluid duct is structured to provide a plenum.

34. (Currently amended) A system to attenuate jet engine noise comprising:
a nacelle surrounding a fan rotor and a fan discharge outlet guide vane; said nacelle having an inlet fan duct outer wall;
an acoustic liner attached to said nacelle;
a turbine shaft for generating motive forces on said fan rotor; and
a fluid duct for increasing air velocity adjacent to said inlet fan duct outer wall;
wherein said fluid duct has a first end with a slot therein opening to said inlet fan duct outer wall, a body, and a second end with a slot therein opening to aft of said fan rotor, the slot in the first end being disposed upstream of the fan rotor, wherein said fluid duct is configured such that air flows from the first end, through the body, and is injected aft of the fan rotor from the second end of said fluid duct, and wherein at least one of said

first end having a slot therein, said second end having a slot therein and said body is structured in an annular form.

35. (Original) The system as in claim 28, wherein said fluid duct is substantially disposed within said nacelle.

36. (Cancelled)